

Resource Adequacy in MISO Zone 4

Outline for January 30, 2018 Comments

Post-Workshop Comments of International IBEW Local # 51 on Illinois Commerce Commission MISO Zone 4 Resource Adequacy

The International Brotherhood of Electrical Workers Local #51 appreciates the opportunity to submit written post-workshop comments on resource adequacy in MISO Zone 4. IBEW Local 51 represents about 700 hourly workers in six (6) different power plants located in Zone 4. These workers all have a stake in the outcome of the workshops and any resulting actions or non-action taken by any agency, regulatory body or the General Assembly.

I. Resource Adequacy Standards

- A. How should resource adequacy be defined and how does resource adequacy compare with or contrast with resiliency and reliability?

Local 51's definition of resource adequacy is as follows: The total adequate generation resources throughout the year needed to: 1) meet normal daily load demand during normal weather conditions for any given day, 2) meet demand changes due to the availability of generation resources and, 3) to meet demand changes due to abnormal weather conditions, emergencies and emergent changes to load demands. To meet MISO Zone 4 resource adequacy a significant portion of the adequate generation resources should be located geographically in Zone 4.

When combined with other factors, such as adequate transmission and distribution equipment, Local 51 believes resource adequacy helps to ensure reliability. We believe a capacity shortage exists when inadequate total generation resources exist for a forward-looking period of time. Factors that influence the availability of adequate generation resources are the availability of high capacity factor generation resources geographically located in Zone 4 to meet a majority of the daily load demand, daily fuel resource mix, generator operating characteristics, fuel characteristics, fuel sources, generating unit capacity factors, transmission facilities and distribution equipment.

- B. What entities currently address resource adequacy, how do they do so, and how sufficient are such current measures?

II. Resource Adequacy Measurement

- A. How much generation is currently available to meet Zone 4 resource adequacy requirements?
- B. What generation resources formerly meeting Zone 4 resource adequacy requirements have recently been lost due to retirement, derating, declining capacity factor, or otherwise?
- C. What current generation resources available to meet Zone 4 resource adequacy requirements are at risk of becoming unavailable going forward and what are the implications of the loss of such resources?

There are generating plants in Zone 4 currently at risk of shutting down due to the financial disadvantages caused in part by poor auction construct. Other factors that may cause existing generation to shut down include additional costs needed to meet any new regulations. The at-risk plants are located in Zone 4, employ hundreds of downstate residents and provide millions in economic benefits to the State and to the communities they are located in.

- D. What are the prospects for new generation resources becoming available to meet Zone 4 resource adequacy going forward?

New generation in Zone 4 will add to the total capacity in Zone 4. It is prudent to the accuracy of any assessment of new renewables on Zone 4 resource adequacy for capacity factors of renewable energy sources to be taken into consideration when evaluating Zone 4 resource adequacy, reliability, resiliency and the daily fuel mix in Zone 4.

- E. What non-generation resources are and may be available to meet resource adequacy and how do such resources impact resource adequacy?
- F. How well do existing programs and initiatives predict future resource adequacy?

III. Market Design Impact on Resource Adequacy

- A. What alternative opportunities are available to resources that could otherwise be used to meet resource adequacy in Zone 4 and how do these opportunities impact Zone 4 resource adequacy?
- B. How does the transmission system impact resource adequacy?
- C. How do facilities owned by municipals and cooperatives affect resource adequacy?
- D. How does bilateral contracting, self-supply, and fixed resource adequacy planning affect resource adequacy?

- E. How do so-called out-of-market revenues (revenues separate and apart from those obtained in wholesale markets (e.g., Zero Emission payments or renewable energy credits) impact resource adequacy?

If generation resources were provided credits or payments similar to Zero Emission Credits it would promote commitment to providing capacity to the region and could promote additional investment in existing or new resources. Without some sort of financial recognition to non-regulated generation supplying capacity to Zone 4 the future operation of multiple plants in Zone 4 is in jeopardy.

IV. Scope

- A. Please provide commentary on any relevant substantive or process issue you believe has not been adequately captured in the Sections above.

There is no need to expand the current examination of MISO Zone 4 resource adequacy or extend the time to prepare and submit a summary report.

V. Potential Policy Options

- A. What changes, if any, should be made to better enable measurement and assessment of what resources are available to meet Zone 4 resource adequacy requirements?

In counting resources within the current MISO interconnection queue for purposes of assessing their value in meeting future Zone 4 resources adequacy the individual capacity factor for each generation resource should be considered, the average percentage of the daily fuel source makeup in Zone 4 from each generation resource should be included and whether or not a generation resource is geographically located in Zone 4 should be a factor.

Scenario modeling is a reasonable approach for resource adequacy assessments. Loss of additional generation resources will impact the capacity factors of remaining plants. More approved shutdowns could cause some generating units to run at higher capacity factors while others may run less. Operating plants with adequate environmental controls often allow generating units with less environmental controls to operate more frequently. With a shutdown of a plant or unit with adequate environmental controls, a generating unit may run less if they lack adequate environmental equipment. In those cases, units not added to daily load serving needs would run less.

When MISO is notified of a generating unit retirement the loss of said capacity must be taken into account in determining the effect on resource adequacy, reliability, resiliency, adequate in region resources and the daily needed fuel mix in the MISO region and Zone 4.

MISO's plant retirement process should be altered to better measure resource adequacy by utilizing both immediate and long-term scenarios in the plant retirement process. The plant retirement process should include the percentage of the retiring plants fuel source in the daily fuel resource mix in Zone 4 and the impact on total generation capacity located in Zone 4. As a side suggestion, MISO should make accessible on their website a Zone 4 daily fuel resource pie chart (identical to the MISO Region pie chart).

- B. What changes, if any, should be made to MISO's capacity construct including to the MISO planning resource auction to better ensure resource adequacy?

MISO's capacity construct does not ensure resource adequacy. One problem is when plants submit retirement notices MISO identifies distribution or transmission reliability issues associated with the retirement without a direct assessment of the overall impact of the loss of a generation resource on Zone 4 resource adequacy. Therefore, a SSR designation from MISO doesn't directly relate to Zone 4 resource adequacy. The process could shed light indirectly on resource adequacy, if multiple and, possibly excessive, SSR designations occur in a given geographical area or in a compressed time frame. Although the identified issues will likely be tied to reliability, the lack of adequate transmission facilities and distribution equipment may signal a resource adequacy deficiency would exist without significant and/or immediate remedial action to ensure reliability. The work to remediate reliability issues associated with excessive and compressed plant shutdowns could be long term in duration and the cost of construction could be high in many situations. When coupled with costs to operate SSR plants MISO customers will face rate increases.

MISO should move to a more forward-looking auction rather than a prompt auction. A longer forward-looking process will help promote the stability of existing capacity and provide a clearer view of what plans are being made for new generation capacity. In addition, if regulated entities bid generating resources, who recover their costs through regulated rates, into the auction MISO must change the auction process. Regulated generation resources must be required to bid in at prices no lower than their cost to produce the capacity plus the regulatory rate of return ensured by their regulatory body.

- C. What changes, if any, should be made to MISO's energy or ancillary service constructs that would help maintain resource adequacy?
- D. What actions should the Illinois Commerce Commission and/or the Illinois Power Agency take, if any, to address resource adequacy assuming no new legislative authority?
- E. What actions should the Illinois General Assembly take, if any, to address Zone 4 resource adequacy?

Pass legislation proposed in Senate Bill #2250 or House Bill #4141 will help ensure resource adequacy in Zone 4; it could be changed to include any necessary issues identified in this process.

F. Please describe any additional potential policy option(s) you would like to see considered or that you would recommend not be considered.

G. Is it important for any selected policy option to be market-based? If so, why? If not, why not?